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ABSTRACT

A review of technological, political, social, and economic forces affecting the world of work indicates that in the eighties significant changes can be expected in the following areas: the nature of organizations, the relationship between individuals and organizations, the nature of the work force, the nature of the workplace, and the nature of compensation practices. Included among the driving forces for change in the work environment are changing demographies and values, continued decentralization, continued expansion and merging of communications and microelectronics, recognition of new economic realities, changing educational attainment, and increasing globalization. Several short-, medium-, and long-term strategic issues will play key roles in the changing workplace of the 1980s. Inflationary impact, productivity, and women in the workforce are three such short-term issues. Issues likely to surface during the middle of the eighties are minorities in the work force, flexible work schedules, layoff and plant closing policies, retirement policies, growth of the Hispanic population, pension funds, occupational health and safety, equal pay for equal work, and racial discord. Continual movement to an information society and changing management philosophies are likely to affect the world of work toward the end of the decade. (MN)

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LONG RANGE PLANNING

Assistance for Local United Ways

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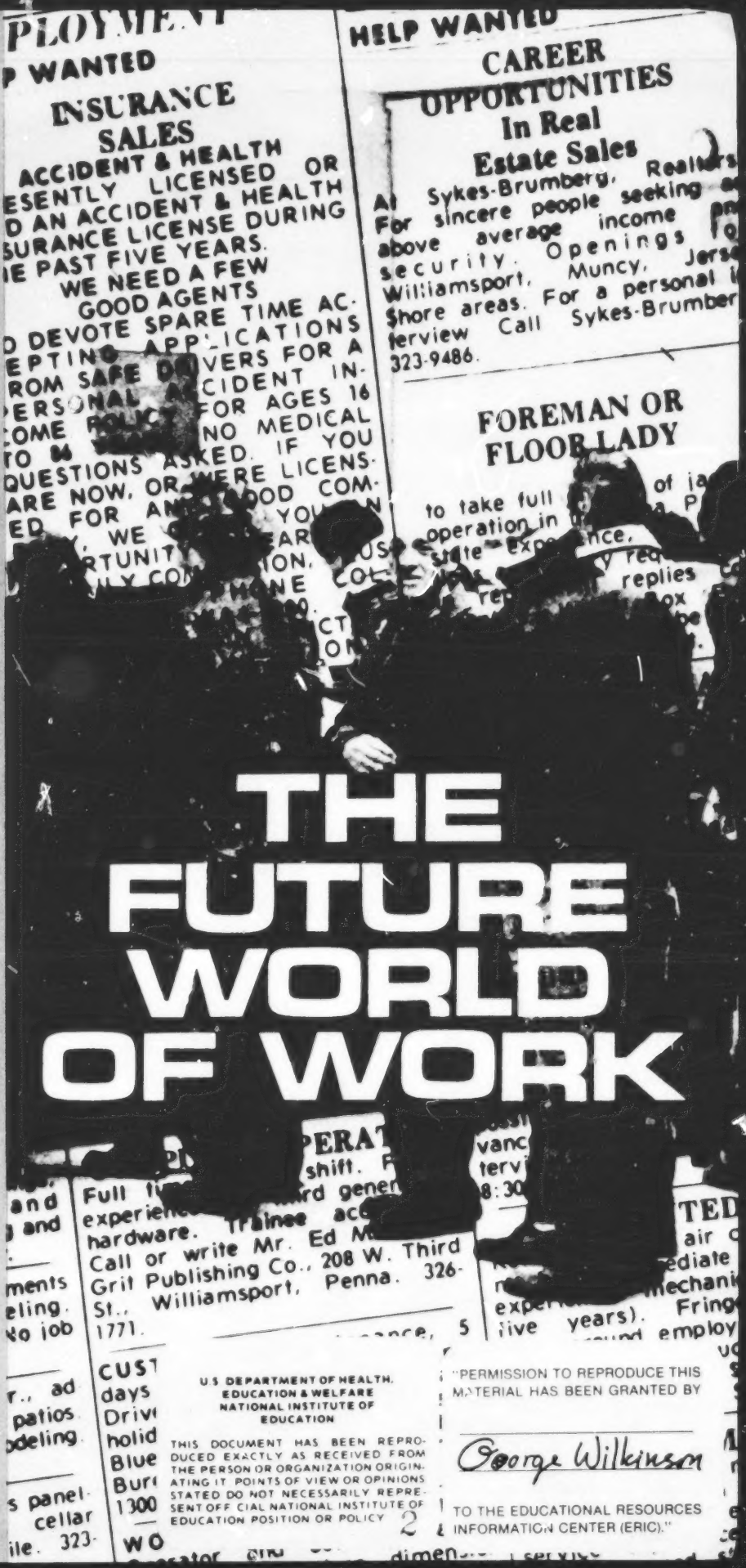

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The Future World of Work

By George Wilkinson

United Way
of America

A report from the Long Range Planning Subcommittee on Environmental Scanning/ Strategic Planning Development.

LYNNE HALL, Chairman

Price: $2.00

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DEAR FRIENDS AND COLLEAGUES:

"The Future World of Work" is a continuing effort to identify aspects of the future which have relevance to United Way's role and mission during the 1980s.

The workplace is a vital resource to the community. Not only is it the main source of funds, but it will become increasingly important as a vehicle **from which** and **through which** people in need are linked to services delivered by the voluntary sector. This document will help you understand trends affecting our society and the workplace.

Dr. George Wilkinson, senior consultant, Long Range Planning, wrote this report. George would welcome any questions you have. He may be reached at United Way of America or by calling 703—836-7100.

WILLIAM ARAMONY
National Executive

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Introduction

The 1980s will be a time of considerable change. This change may not be dramatic, in the sense of night versus day distinction, but it will be rapid with far-reaching social consequences.

Technological impact will be profound as corporations fight against lagging productivity and inflation. The impact of new technologies will vary dramatically by geographic region and by industry.

Our government will, for the next few years, move away from any "soft" social programs particularly those which are noninstitutionalized as is Social Security then return to new social programs as the pendulum swings left again. Responsibility for many social programs will increasingly become a matter of local determination and for some a focus of corporate responsibility.

While the '80s might seem frightening to many, it will be a time of tremendous opportunity for organizations with foresight. The United Way system, with its decentralized, locally governed base and a national support organization, is in the right place at the right time to exercise its leadership potential. United Way must continue to examine trends and events which affect its operating environment. It must understand its organizational strengths and weaknesses, and build strategies to take advantage of change. But it too will have to change.

The Subcommittee on Environmental Scanning/Strategic Planning Development undertook a study of the future world of work at the request of the United Way of America Long Range Planning Committee. Based on the subcommittee's earlier work in environmental scanning and its subsequent report, "What Lies Ahead," the subcommittee examined how the driving forces that will shape the decade ahead would come to change the world of work itself.

The purpose of this report is to provide a base document from which United Way local and national long range planning efforts can begin to identify issues of the workplace that will impact the ability of the United Way system to carry out its role and mission and plan accordingly.

The report is not intended as a crystal ball in predicting things to come. The current state of the art cannot render the future less uncertain. It can only make it more manageable through systemic and systematic speculation about future developments and the magnitude of their impact. The motive behind this report is to provide United Way with sufficient lead time to manage, rather than be managed by, change.

The subcommittee met for one-and-a-half days, December 3 and 4, 1980 in Alexandria, Va. During this time the subcommittee benefited from presentations by its members and held open dialogue surrounding issues. It used an electronic system for decision making called the Concensor to determine the level of change (impact) each issue would create in the work environment and when (maturity) the significant issues would create in the work environment and when (maturity) the significant issues would call for resource deployment by managers. The subcommittee also conducted a brainstorming session (a future wheel exercise) to identify broad implications of three of the issues deemed significant. The exercises used in the subcommittee work are explained in the United Way of America publication, *Environmental Scanning*.

The 1980s in probability will become the true watershed for the transition from an industrial to an information society. The driving forces already in motion will be directly and specifically manifest in the workplace over the next ten years. Many hold the view that the workplace may well become the dominant institution of the '80s. It could displace the family, the church and the school as the most pervasive socializing agent in the United States simply because more people will be affected by the workplace than by any other institution.

While preparing this report, the subcommittee acknowledged that the very nature of measuring and generating wealth is being questioned and alternative measurements sought. We recognized that the value added in industrial production from raw material to base goods to finished product does not apply to the service sector and its processing of data and services, nor is the value of government computed in the nature of our economic measures.

Our view of the future world is tempered by a recognition of economic and political uncertainty yet is based on the realites of the forces of change already in motion. It also represents a concensus viewpoint of many diverse opinions.

LYNNE HALL, Chairman

Subcommittee on Environmental
Scanning/Strategic Planning Development

The Future World of Work
A Glimpse of 1990

A review of trends now deemed to be the most probable change agents over the next decade provides a glimpse of the future world of work that might look something like this:

THE NATURE OF ORGANIZATIONS. In the past, we organized work in a manner similar to the traditional military model. There were clear lines of authority and the ideal organizational chart looked like a pyramid, with decisions being made at the top and flowing down to subordinates for execution.

In the future, there may not be any one ideal organizational model, but organization charts will more likely resemble spider's webs than pyramids. Workers may more nearly resemble small entrepreneurs within organizations than subordinates who only follow orders; there will be organization. This new organization is being identified as the network or matrix organization.

THE RELATIONSHIP BETWEEN INDIVIDUALS AND THE ORGANIZATION. With the emergence of the network organization, a change has occurred within the authority structures. This change came about as more workers were called on to participate in decision making and study groups throughout the organization. These groups may range from quality control circles to corporate social contribution committees—led in task teams by designated individuals. Individual authority varies as a person leads one group but serves as a participant in others. An effort has been made to treat all group members as peers to encourage participation and group productivity. Responsibility for group output is shared and rewards flow toward achievement. More organizations are led by a collegial chief executive officer. Personnel policies are more reflective of employee rights and due process. The movement toward professional organization of both labor and management (not previously organized) has continued and both are more frequently represented on corporate boards of directors.

THE NATURE OF THE WORK FORCE. The composition of the work force reflects the increased numbers of women and minorities. Advanced development of communication and computer technology has provided increasing substitution and liberation for the human worker. The ratio of managers and technicians to production workers has continued to increase.

An increased percentage of the work force is composed of new immigrants (legal and illegal). The age of the average worker has now risen to 33 from 29 in 1977. This work force, on paper, has the highest level of educational attainment in history.

THE NATURE OF WORK. The push into the post industrial society has continued the thrust of most work emphasizing brains over brawn. Heavy industries are increasingly automated with increased use of robots and are staffed mainly by technicians. Light industry is beginning to spread throughout the United States as cottage-type small units reflecting decentralization and hometown entrepreneurship. Information processing and communication-related service industries are increasing and becoming dominant.

THE NATURE OF THE WORKPLACE. Employment patterns are beginning to change as increasing numbers of options have become available to management and the work force. Many workers are engaged in alternating periods of education, work and leisure. More organizations provide annual employment guarantees and pressure is increasing for lifetime employment guarantees to selected groups of workers. Experimentation with employee "rental" contracts from one firm to another for maintenance of skilled work forces during slack times is increasing. Contracting for specific task accomplishment (consultancy) by individuals and groups of workers continues the development of entrepreneurial efforts. Alternative work schedules, including the compressed workweek, work sharing and flextimes are becoming accepted practices.

THE NATURE OF COMPENSATION PRACTICES. The impact of new business strategies, competition, the thrust for higher productivity, technological changes and the composition of the work force are affecting and changing compensation practices. Multibusiness enterprises are beginning to differentiate compensation practices by business versus a single wage/benefit approach; skill shortages/dual income families are beginning to force new forms of work scheduling and therefore new approaches to compensation determination; productivity objectives are spawning new gain-sharing plans; job security issues are leading to innovative approaches in income security guarantees; there will be greater demands for equal benefit plans for hourly and salaried employees; women's pay will increase at a greater rate than men's especially in the salaried categories; more attention will be given to retiree's pay and benefits, and government will put increased pressure on employers for compensation cost containment.

The Driving Forces for Change in the Work Environment

The glimpse presented of the future world of work was based on an in-depth examination of the macro environment identified in the United Way of America publication, *What Lies Ahead*. From this review of the

trends and assumptions cast in the societal, economic, political and technological areas, six major driving forces were identified as evoking the possibility of greatest change. These forces were: (1) changing demographics and values, (2) continued decentralization, (3) continued expansion and merging of communications and microelectronics, (4) recognition of new economic realities, (5) changing educational attainment and (6) increasing globalization.

DEMOGRAPHICS AND VALUES. Several trends are dominant in the changing demographics of the 1980s. We will see slower population growth, a maturing of the World War II baby boom, a growing societal role of women, a geographic restructuring of our population from north to south, and a growth of our minority populations—especially the Hispanic—as a percentage of total population. With respect to a change in values,* traditional values that emphasize conformity, materialism, comfort and success will continue to be dominant; however, there will be a significant rise in the new values group from 17 percent of the adult population in 1978 to 26 percent of the adult population in 1990. It should be further recognized that the impact of the new values is causing traditional values themselves to be realigned and redesigned. These new values emphasize: persons over institutions, quality over quantity, individualism over conformity, diversity over uniformity, experience over things and participation over authority.

DECENTRALIZATION. Alvin Toffler's third-wave demassification concept (small is better) is becoming increasingly evident. An allied trend is the growing middle-class revolt. Accordingly, it is likely that there will be an increase in Proposition 13-type measures, boycotts and class-action suits, generally prompted by the tendency towards special interests associated with the younger population group. The movement toward decentralization is accelerated with new values stressing particpaton in decision making, hence the increase in referenda and tne shift from representative to participatory democracy. Also seen is the growth of neighborhood power as a new political force as evidenced in the increase in local self-help programs.

COMMUNICATIONS AND MICROELECTRONICS. More profound than the shift in the 19th century from an agricultural economy to an industrial economy is the current shift from an industrial base to an information base. In little more than a decade, microelectronics technology has blossomed from an expensive space-age curiosity into an irresistible force that is rapidly transforming society. The ever-developing "computer chip" is working its way into an increasing array of manufacturing processes and goods—from digital watches and interactive home computer-television to robots that "see" and "feel," and automated systems.

In 1950, 65 percent of people working in this country were working in the industrial sector. That figure is now 30 percent. Today, 55 percent of American workers are information workers paid to process data or information. The strategic resource in the industrial society was capital, while the strategic resource in the information society is knowledge—data that is not only renewable but self-generating. The use of the new technology is causing productivity and employment shifts which are changing the nature of interaction between leisure, education and work.

NEW ECONOMIC REALITIES. Over the decade, institutionalized inflation at almost double digits, high unemployment, higher energy prices, slow productivity growth and the continued shift to the post industrial era will create uneven occupational employment and unemployment distributions. Hardest hit areas for unemployment will be those industries impacted by changing technology and foreign competition. The 1980s will also be a period of heavy capital investments as industry and government act to increase the long-time productivity growth rate and meet foreign competition.

CHANGING LEVELS OF EDUCATION. The profile of the U.S. population will change remarkably over the decade ahead so that by 1990, Americans will be older, and if not wiser, at least should be better educated. By 1985, over 50 percent of the population will have completed high school, up from 40 percent in 1975. In addition, college graduates as a percentage of the total civilian labor force will increase from 13.2 percent in 1970 to a projected 21 percent in 1985.

GLOBALIZATION. Concepts such as the "Global Village" and "interdependence" generally express the nature of the shift from a national to an international orientation. When the national media become enthralled with such as the Iranian or Polish situations, the Soviet Union invasion of Afghanistan, Japanese imports and other such high visibility issues around the globe, there is a tendency to miss the growing reality that we are part of a very interdependent global economy. What happens in other countries has a very direct impact on what happens here because of the intricate connecting web of economic relationships, communications and not just because of politics. World reliance on U.S. grain production and our reliance on foreign energy, such as OPEC oil, Mexican gas and Canadian hydro-electric power, demonstrate such interdependence. Growing investment in the U.S. by foreign corporations is also noticeable. The movement of the French Renault Corporation into American Motors, the acquisition of American firms by Siemens A. G. of West Germany and other investments of foreign countries in the United States tend to illustrate once again other facets of interrelationships.

*As defined by SRI International.

Issues Within the Changing Workplace During the 1980s

Throughout the remainder of this report, our focus will be on strategic issues. As we describe it, a strategic issue is a forthcoming development, either inside or outside of the organization, which is likely to have an impact on the ability of the enterprise to meet its objectives. An issue may be a welcome issue, an opportunity to be grasped in the environment, or an internal strength which can be exploited to advantage. It can be an unwelcome external threat, or it can be an internal weakness which imperils continuing success, even the survival of the enterprise. Frequently, external threats, because they signal significant discontinuities in the environment, can be converted into opportunities by aggressive and entrepreneurial management. In fact, such ability to convert threats into opportunities has been one of the most prized characteristics in the history of American management.

We examined the broad external environment and its driving forces for the 1980s to gain organizational lead time for planning a strategic response to issues deemed most critical to the United Way's operations. Lead time is a crucial factor in managing change largely because the forces for change move issues through four critical stages: (1) expectation, (2) politicization, (3) legislation and (4) litigation, with each successive stage narrowing organizational options and limiting organizational performance.

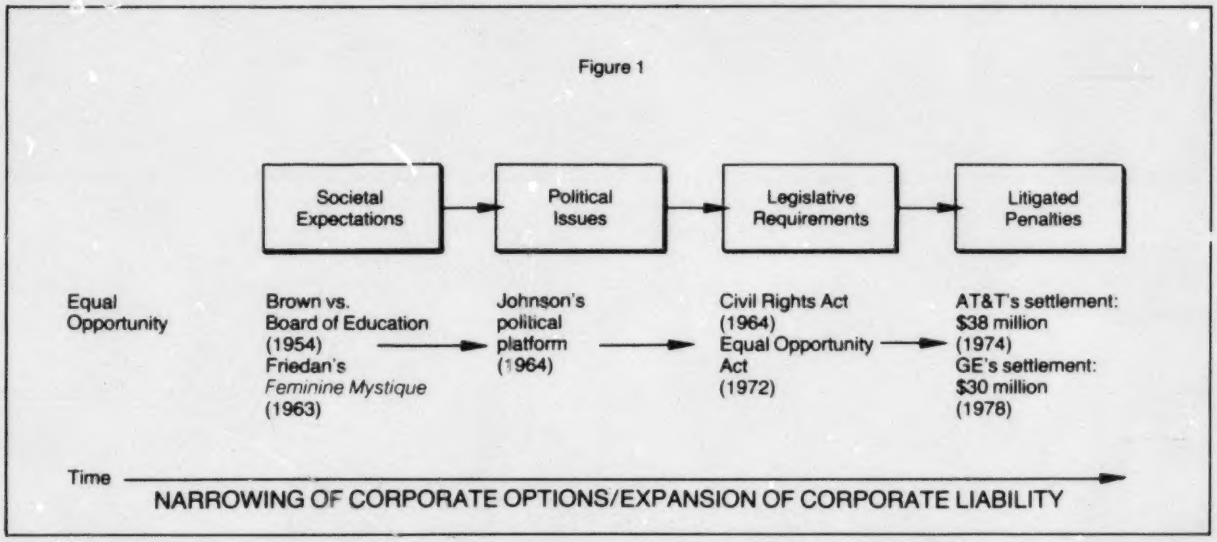
A particularly pertinent illustration of this point is the demand for equal employment opportunity. This issue reached public recognition in action terms with the 1954 Brown vs. Board of Education Supreme Court decision, followed by the 1963 publication of Betty Friedan's book *The Feminine Mystique*. These developments signaled serious social concern and expectations for the protection of ethnic and feminine rights. Next came politicization of the issue with former President Johnson's 1963-1964 campaign platform, followed by legislation with the passage of the 1964 Civil Rights and 1972 Equal Opportunity Acts. Finally came litigation against noncomplying companies, with two of the most highly publicized examples being AT&T s 1974 $38 million settlement and GE's 1978 $30 million settlement. (See Figure 1.)

In this connection, a relevant observation is that if the 1960s and 1970s represented the expectation stage of new employee demands, then the 1980s are likely to represent the politicization stage. The extent to which the future world of work is merely "constitutionalized" as opposed to being fully "legalized," will be largely a matter of organizational skill in anticipating (and buying lead time), interpreting and responding to the fundamental forces for change.

The 1980s, in all probability, will become the true watershed for the transition from an industrial to an information society. The driving forces already in motion will be directly and specifically manifest in the workplace over the next ten years. Employees will play a major role in determining the degree to which these transitions result in an environment that is complimentary or hostile to organizational enterprise. Thus, the '80s may be the decade of the employee.

As the subcommittee examined the possible changes in the future world of work that were primarily caused by the driving forces and their interaction, some 58 issues were identified as containing a possibility for creating significant change. The subcommittee selected 15 of these as having the highest potential of becoming a major issue and postulated on the time frame in which the issues would mature enough to require significant allocation of organizational resources for their study and management.

Figure 1



Near Term (1981-2) Major Issues

INFLATIONARY IMPACT. The real and psychological impact of institutionalized inflation over the decade at an average rate of eight to ten percent will have major consequences at the job site. Any relief due to the likelihood of early economic turnaround is remote. This is a deep-rooted problem that even with vigorous governmental action, will take years to solve.

As a pressure point on economic well-being, inflation fuels all issues cited as critical in this report and will give rise to a number of other related issues such as the continued demand for higher wages; unemployment; employee crime; increased unionization among technical and professional workers (including managers), and provision of additional employer-furnished health and social services.

Furthermore, inflation also generates a growth in the hidden or subterranean economy. These "off-the-books" transactions are currently estimated at a range between 10 percent and 30 percent over the official GNP.

PRODUCTIVITY. Productivity is defined as the utilization of all factors of production—land, capital, plant, equipment, materials and human resources—that yield maximum return for minimum input on investment. Increasing emphasis will be placed on the human factor as a central element in productivity over the coming decade because of the transition in the mix and rate of economic growth, evolution of a markedly different business environment, the shifting nature of work and the changing character of the labor force. This issue is well into the politicization stage and could move rapidly into a legislation stage over the decade because of its prominence as a factor in national economic performance.

WOMEN IN THE WORK FORCE. Women streamed into the work force in the 1970s. About three out of five people entering the work force during the decade were women. During 1979 alone, women garnered 1.4 million, or two out of three, of the 2.1 million jobs added to the economy.

Women are expected to have continuing significant impact by entering the labor force at the rate of nearly one million per year during the 1980s. The work force participation rate for women was nearly 52 percent at the beginning of 1980, compared to 43 percent a decade earlier. This is expected to increase to 70 percent by 1990.

This push of women into the work force will continue to bring about social change. From the possibilities of aiding inner city revitalization (as two-income families try to cut commuting time), causing higher unemployment rates to affecting compensation systems and traditional male/female roles in all job categories, (as well as those in home and family), the issue of women in the work force is well into the legislation stage and is moving rapidly into the litigation stage.

Medium Term (1983-85) Major Issues

MINORITIES IN WORK FORCE. The 1970s brought little improvement in the employment picture for minorities. Jobless rates were high and labor force participation rates declined. Inadequate basic education, poor job skills, obsolete job skills, location in depressed geographical areas and discrimination were main causes of minority unemployment.

In a major departure from previous patterns, college-educated blacks and Hispanics participated in the labor force at starting salaries and opportunities that matched or exceeded those for whites.

In general, minorities will be facing a continuation of wage and opportunity problems, as emerging social and economic changes intensify competition for jobs. Good jobs—challenging positions with good pay—will be at a premium. Society's dirty jobs—boring, unsafe or low-paying jobs—may be filled by the ever-rising tide of illegal immigrant labor. Keen competition for jobs could, among other things, create a backlash against affirmative action programs.

Although blacks and other minorities have made real gains, public support for new programs that aid minorities may be diminishing. This could lead to an increase of racial conflict.

FLEXIBLE WORK SCHEDULES. Flexible work schedules are compatible with both contemporary lifestyles and the increasing demand for expanding job opportunities. In addition, this approach capitalizes on the idea that though proportionately less time may be spent on work, the quality or output may be substantially higher when service workers are committed to their assignments.

There are basically three types of flexible work styles: (1) part-time and temporary, (2) flex-time and (3) job-sharing arrangements.

PART-TIME AND TEMPORARY SCHEDULES. Traditionally, employees in this category have filled clerical and/or blue collar jobs at peak periods. In the future, trend towards use of part-time employees will extend to supervisory, administrative and even certain management jobs particularly as the move toward task force and/or matrix management accelerates.

A key factor promoting this trend has to do with who's available and demanding part-time work—namely, older skilled workers, professional women choosing to balance careers with household responsibilities, students, the handicapped, and highly trained people who place a premium on leisure, including middle and senior managers embarking on second and third careers.

FLEX-TIME. Flex-time began in Europe and is still used most extensively in Switzerland. Typically, it involves a core number of hours shared by all employees, with the arrival and departure time at

the individual's discretion. Most companies report substantial benefits in the form of higher morale and higher productivity.

JOB-SHARING ARRANGEMENTS. Job-sharing arrangements have been tried extensively in Europe and in the service industries in the United States. The concept involves one job shared by two (sometimes three) persons on rotating intervals. In effect, it is a variation on part-time work.

LAYOFF/PLANT CLOSING POLICIES—REGULATIONS. The issue of guaranteed employment manifests itself in a variety of forms. Driven mainly by geographic relocations of industries and the new economic realities, workers and urban politicians will strive through contract negotiations and legislation to initiate some aspect of this protectionism during the 1980s.

Studies have shown that applied as a management response, the results of guaranteed employment for select groups of employees have yielded higher morale, increased company loyalty, greater productivity and less resistance to technological innovation and work-rule changes.

Several examples of approaches to issue resolutions are as follows:

NO-LAYOFF POLICIES. Lincoln Electric Company, IBM and Texas Instruments all have no-layoff policies either as contractual provisions or as unilateral company commitments to employees. In the case of Lincoln Electric Company, productivity is twice, and turnover is one-fifth, the industry norm.

ANNUAL EMPLOYMENT GUARANTEES. Some companies, such as Michigan Sugar Company, use reassignment, job rotation, or core classification of jobs to guarantee year-round employment so that even during slow seasons employees are guaranteed steady work assignments.

MINIMUM HOURS. Some companies, including the Wisconsin Public Service Corporation and several other public utilities, guarantee a minimum of approximately 2,000 hours of work a year to employees. Paychecks do not vary despite increases or decreases in labor hours, since an annual accounting brings salary in line with hours worked.

EMPLOYEE "RENTAL" CONTRACTS. Popular among Japanese and certain European industries is the concept of a rental contract whereby the employer rents idle employees to another (typically noncompetitive) firm for a specified period of time, thus maintaining the employee's salary and work irrespective of the primary employer's economic activity.

LIFETIME EMPLOYMENT GUARANTEES. *The New York Times, Daily News* and *The New York Post* virtually guarantee lifetime employment to a select group of workers whose assignments are rapidly being made obsolete by technological change.

RETIREMENT POLICIES. A tug-of-war is emerging between the new economic realities (higher inflation, low economic growth, new technologies, etc.) and an increasing labor force that will outstrip available jobs in the early decade.

While retirement policies have been liberalized to encourage movement of older (and more expensive) workers out of the work force, mandatory retirement before age 70 is now illegal for most people. In times of economic hardship and in light of affirmative action and immediate quests for organizational cost-benefits, the human resource layoff conflict of "last-on-first-offs" and early retirement will compound decision making.

A secondary issue of retirement benefit portability will also become a concern for the middle-aged worker and employers over the decade.

HISPANIC MINORITIES. Aside from the general issue of minorities in the work force, issues relating to the growing Hispanic population will surface. (The subcommittee held a divided opinion as to the time that these issues will be maturing. Roughly half of the group saw the medium term as critical while the other group saw it as a long-term issue. It also noted that the issue's significance will be geographically dependent.)

Some recent forecasts are calling for 30 to 45 percent of the labor force growth over the decade to be aliens (legal and illegal) of primarily Hispanic origin. Others are forecasting that by the year 2000, there will be 30 million Hispanics in the population.

While both blacks and Hispanics have made major gains in educational attainment, only 55 percent of the current Hispanics complete high school compared to 75 percent for blacks and 85 percent for whites.

Conflict between races for entry-level jobs is likely to escalate. Technological improvements as a substitute for the human factor will tend to further heat this issue. Advancement of both minority groups in the work force will be compounded by the hesitancy of older white workers to retire in tough economic times with uncertain retirement benefits

PENSION FUNDS. A major issue of the decade will be the solvency, funding and control of private pension funds and social security. Current slow economic growth coupled with demographic changes pose problems for all retirement income systems. Inflation and unemployment threatens the adequacy and even the security of benefits. An aging population—more older people living longer—strains the resources of Social Security and private pension plans.

The number of aged, retired and disabled persons is growing more rapidly than those who work and bear the burden of rising retirement benefits.

In terms of size and impact on the economy, Social Security is by far the most important retirement income program because:

- Social Security benefit payments in fiscal 1979 amounted to $101 billion paid out to a total of 35 million people, including retirees and their dependents, disabled workers and their dependents and survivors.
- 114 million workers paid Social Security payroll taxes in 1979.
- Social insurance taxes and contributions accounted for an estimated 30 percent of total Federal revenues in 1979.
- More than half of all families in the United States now pay more in Social Security taxes than in income taxes.

The Social Security system now is faced with both an immediate funding problem and the possibility of a long-run funding problem. Costs of indexed pension benefits—benefits that rise with inflation—have increased much more rapidly than anticipated in the most recent decade due to inflation, and benefits will continue to soar as the population ages.

At the same time, Social Security has an impact on private saving, and thus, on capital formation. Decisions about changes in the Social Security system, therefore, carry major implications for economic growth and should be a part of the government's unified and coordinated approach to the range of problems which beset the "stagflation" economy.

The assets accumulated in pension funds provide an important capital source for productive enterprise. For example:

- Assets of private pension plans in 1978 amounted to over $321 billion. These assets represented about 27 percent of GNP, or more than double their percentage of GNP in 1950. By 1985—if assets grow at a four percent compound rate—the total value of these stocks, bonds, real estate and other investments will amount to $422 billion.
- Federal civilian retirement systems in 1978 had accumulated assets of $57.7 billion which are invested in government securities.
- State and local government pension systems in 1978 had about $142.6 billion in assets, largely invested in private securities. If assets grow at a four-percent compound rate, the total will be $187.7 billion by 1985.

Employees of American business, together with public employees and school and college teachers—through their pension funds—own about 35 percent of business' outstanding equity capital. In the 1980s, control of pension assets could become a major issue, with important ramifications for regional and sectoral economic growth.

OCCUPATIONAL HEALTH AND SAFETY. New issues of occupational health and safety are beginning to emerge and will heighten over the decade as movement to the post industrial society goes forward. Working conditions are being redefined.

Claims are now being seen regarding working conditions of the "knowledge" worker such as: the effect of the video display tube (VDT) on pregnant women; depression caused by constant exposure to the VDT; indoor pollutant hazards, and worker and executive stress.

Questions of a moral and ethical nature are also being raised with respect to responsibility/accountability for physically or mentally hazardous working conditions. Conflicting positions arise as to the "right or obligation" of an employer to conduct employee genetic screening for work with hazardous materials versus the "right" of an employee to seek higher paying jobs at his/her own risk.

The growth of workplace employee services such as counseling for drug/alcohol abuse, day care, recreation and physical fitness escalates the responsibility question between employee/employer and providers—industry, labor, government and the not-for-profit sector.

EQUAL PAY FOR COMPARABLE WORK AND WORTH. Increased women and minorities in the work force will affect traditional compensation systems. As access and advance is limited over the early decade, compensation systems will be challenged on issues like equal pay for comparable work, equal pay for performance and equal pay for unequal work. All these challenges will call for a reevaluation of the worth of different occupations and positions.

Discrepancies such as the $13,500 paid to a starting male liquor store clerk in Montgomery County, Md., compared to the $11,000 paid to a beginning female librarian are often cited as examples of the issue of comparable work.

The diverse nature of the impact of the driving forces will generally affect all compensation systems.

RACIAL DISCORD. As cited previously under "Minorities and Hispanics," the major issue of racial discord over access to jobs seems most likely. Educational inequities and displacement due to technological advancements, coupled with new economic realities and demographic changes mandate attention to this issue.

While a strong economy would be the solution to many issues already expressed, the likelihood of early economic turnaround is remote.

Stress between expectations for a better life and practical realities of the '80s will call for imaginative short-range and long-term strategies if we are to avoid the return of the conflicts and social disruptions of the '60s.

Long-Term Major Issues (1986-1991)

DIFFERENT WORK. The continual movement to the information society with application of technological advances in communications/micro-processors and the biosciences will continue to dramatically change the character of work.

Fewer and fewer workers will be employed in the production of goods and the ranks of many clerical and administrative jobs will be reclassified as advanced electronic office and robotic machinery come on line. The social impact of this revolution is expected to be dramatic with millions of workers affected.

Significant adjustments will be required and retraining promises to be at the top of the list. As old jobs are replaced, new jobs will be created. Technicians, programmers, engineers, etc., with new skills will be required.

The issue of education will become paramount. The responsibility of education for the new workers and retraining of old workers will call for a total restructuring of our formal and informal education systems.

MANAGEMENT PHILOSOPHIES. Management philosophy and style are typically defined in terms of McGregor's Theory X/Theory Y dichotomy. Essentially, Theory X holds that the worker dislikes work, has to be driven to perform and is incapable of assuming responsibility. In contrast, Theory Y holds that the worker has a psychological need to work, is motivated by achievement, and achieves best when given a measure of responsibility. (See Figure 2.)

This management style issue is still in the expectation stage, but it may well be one of the most important issues of the decade. It embodies the essence of both organizational and motivational changes required in making significant gains toward the humanization of the work environment.

The strategic significance of this issue derives from two facts of life: (1) management no longer has traditional "sticks and carrots" approaches available to it, and (2) management credibility, authority and legitimacy will be increasingly derived from the consent (and the cooperation) of the managed.

The manifestations of this issue will come largely in the form of demands for increased participation in decisions affecting all aspects of work, rewards and the work environment. Therefore, the challenge will be in how much Theory X to abandon and how much Theory Y to introduce as managers themselves change.

Leaning toward Theory Y is what seems to set apart the Japanese management style from its American counterpart. A recent study by Business International points to productivity and quality performance gains of American workers in Japanese-managed U.S. plants.

The findings of the study show that there are three important management principles which set Japanese operations apart from their U.S. competitors.

1. Japanese manufacturers place emphasis on maintaining a steady work force level by assigning production workers such jobs as repairing machinery, cleaning the factory and painting during slow periods.
2. Japanese managements treat employees at all levels, no matter how junior, as peers, rather than subordinates, and as important contributors to the company's success.
3. This approach develops more "generalist" workers than "narrow" specialists in the belief that job rotation broadens workers' expertise, helps to break down departmental conflicts and improves horizontal communications.

Theory X Premises	Theory Y Premises
• Workers are inherently lazy and must be motivated by external incentives.	• Management is responsible for organizing the elements of productive enterprise—money, materials, equipment, people—in the interest of economic ends.
• Workers are motivated solely by economic considerations.	• Workers are not by nature passive or resistant to organization needs. They have become so as a result of their experience in organizations.
• Since the organization controls the funds, workers assume a passive role and, therefore, can be controlled by the organization.	• The motivation, the potential for development, the capacity for assuming responsibility, and the readiness to direct behavior toward organizational goals are all present in workers. Management does not put them there.
• Workers are basically irrational.	• It is the responsibility of management to make it possible for people to recognize and develop these human characteristics for themselves.
• Since they are not rational, the organization must control the workers to prevent any disruptive influence. Hence, it is the duty those persons who are rational to seize control of the organization and manage the workers.	• The essential task of management is to arrange organizational conditions and methods of operation so that workers can achieve their own goals best by directing their own efforts toward organizational objectives.

Figure 2

Implication for Changes in Management Style

Subcommittee for Environmental Scanning/Strategic Planning Development

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Issues Examined by the Subcommittee

The following is a list of the issues studied by the subcommittee during its work on December 3 and 4, 1980.

Those issues asterisked (*) were identified as having the highest probability of being an issue that would create significant change in the work environment over the 1980s.

1. *Productivity
2. Right to a job
3. Employee alienation
4. Under employment
5. Labor-management relations
6. Employee participation in decision making
7. *Minorities in work force
8. *Women in work force
9. Business provided family services
10. Shared benefit cost burden
11. Illegal workers
12. Taxation of benefits and perquisites
13. Guaranteed employment
14. *Flexible work schedules
15. Recruitment and employment contract practices
16. *Layoff/plant closing policies/regulation
17. EEO compliance
18. Mobility of dual career families
19. Wage/price controls
20. Blurred management roles
21. Employee retraining
22. Job redesign/enrichment
23. *Retirement policies
24. Profiling individual employees to match strategic business thrust
25. Employee crime
26. *Hispanic minorities
27. *Pension funds (control) (funding) (solvency)
28. Entitlement
29. Increased professionalism
30. Sexual harrassment
31. Revitalization—government/industry
32. Property rights of worker to job
33. Automation's impact on higher levels of worker
34. Changing role of unions
35. New values emerging
36. Geographic dislocation of industry
37. Hidden economy—outside IRS control
38. *Toxic poisons in workplace
39. Employer support of health services (rec., health promotion, fitness)
40. Problem of controlling drug use/marijuana use/alcoholism
41. Intergeneration conflict for all facets of job security
42. *Restructuring of Social Security/private pension plans
43. Compensation packaging
44. Psychological harrassment
45. *Equal pay for comparable work
46. Different worker
47. *Different work
48. More government intervention in workplace—health, safety, fairness
49. Resurgence of faith
50. Dispute resolution (the way they're handled)
51. Privacy within organization
52. Inflationary impact (psychological)
53. Dependency of two-income families
54. Continued rise of single parent families
55. Work decentralizations
56. Increase of violent crime/impact on workplace
57. *Racial discord—stress on economic systems access
58. *New motivators—change management philosophies/styles—evaluations—rewards

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